Shared Food Services Working Group Report

Submitted to

Winnipeg Regional Health Authority

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TABLE OF CONTENTS

	Page
Acknowledgements	2
I. Executive Summary	3
II. Report Considerations	9
A) Methodology, Vision and Assumptions	10
B) Process	12
C) Shortfalls and Solutions	14
D) Cost Surveys	23
Table I – Patient Food Services-Costs	25
E) Stakeholder Survey	26
F) Deer Lodge Centre	28
III. Selected Options	29
Table II – Criteria for Development of Preferred Options	31
Table III A and III B – Preferred Options	36, 37
IV. Management Model	39
V. Implementation	42
VII. Appendices	
A) Base Assumptions Used In Costing Options	
B) Options Comparison Worksheet: Cost Adjustments	
C) Deer Lodge Centre Proposal	
D) Shared Food Services Orientation Document	
E) Site Visit Report	
F) Stakeholder Survey Executive Summary	
G) Background	
H) Definitions	
I) Shared Food Services Working Group Membership	

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Many Shared Food Services stakeholders devoted an enormous amount of time and effort to the development of this report. The following document represents only a summary of the volumes of detailed work completed. A special thank you is extended to current food service operations staff, clinical dietitians, Aramark Canada Ltd., and participating Union representatives.

The Working Group would also like to acknowledge that while this document was in progress, dedicated Shared Food Services' stakeholders were responding to improve service to patients and residents. At the same time these stakeholders were improving and maintaining the current system, they provided valuable input into developing the future system.

I. EXECUTIVE SUMMARY

EXECUTIVE SUMMARY

Introduction

In the 1990's, Winnipeg hospitals developed a shared food services model to meet the changing needs in food services delivery. That model proved to be flawed, with problems in food quality and cost-overruns. It became clear that a thorough review and consideration of options needed to be undertaken.

The Minister of Health formed the Shared Food Services Working Group (SFSWG) January 13, 2000. Its purpose was to review current practices and consider alternatives to patient and resident food production and delivery in Winnipeg. Manitoba's new government assisted this endeavor by buying out the Shared Food Services mortgage from Newcourt Capital, allowing time for investigation of alternatives.

The Minister appointed Mr. Hubert Gauthier, Chief Executive Officer of St. Boniface General Hospital, as chair of the 12-member group, and Mr. Mark Neskar, Chief Executive Officer of Seven Oaks General Hospital, as Vice-Chair. The Shared Food Services Working Group included expert clinical, operational and financial representatives. *(See Appendix I.)*

The Minister instructed the working group to submit a report with broad recommendations on the best methods of delivering food services for patients in Winnipeg. The purpose was to address current shortfalls and future needs, examine quality and cost benefits, pay attention to the unique needs of long-term care patients, and recommend the preferred patient food service system, focusing on practical made-in-Manitoba solutions.

Findings

The Working Group has completed an extensive review of the current food service system. It observed a range of shortfalls in the existing system, set out in detail in this report. Briefly, these shortfalls include problems in sourcing food products, responding to client needs, integrating clinical nutrition standards into daily operations, developing the food services database, and defining roles and responsibilities. The Working Group also observed insufficient stakeholder consultation and an overall lack of consistency in both training and in delivery of quality products.

Broad Recommendations

The Working Group proposes changes to improve the current system, making it more responsive to the diverse needs of our patients and residents. The recommendations are as follows:

- Re-introduce locally prepared foods to better serve patients and long-term care residents.
- Prepare a separate menu tailored to the specific tastes of long-term care residents. Allow greater adaptation of their meals, taking into account their unique tastes, food choices and traditional comfort foods.
- Integrate clinical nutrition standards with food service operations.
- Place greater reliance on local leadership talent in managing the Shared Food Service system.
- Consult with key stakeholders to ensure consistent and ongoing communication and collaboration.
- Institute a comprehensive and continuous staff education and training program.

System Recommendations

In redesigning the current system to meet the varied needs of all stakeholders, the Working Group considered 57 options for a new improved Shared Food Service system.

Among these was the independent proposal recommended by Deer Lodge Centre. Their proposal proved most useful in focusing the Working Group on the needs of long-term residents in all facilities. Impacts of incorporating this proposal are presented later in the report.

Through a comprehensive screening process, including feedback and advice from union partners, it narrowed these to 27, and finally to five choices based on an analysis of advantages and disadvantages. These choices are feasible and are deserving of consideration. Each option is unique and complex; therefore, the options are presented in this report as individual systems. Changing parts of one option and adding to another without the in-depth knowledge of the Working Group could result in operational, clinical or financial deficiencies.

In studying quality and cost-related issues, the Working Group examined a survey comparing Winnipeg costs to that of other similar systems in Canada. Winnipeg's cost for daily meals was 16 per cent lower than costs for the next most efficient system *(see Table I)*. This clearly demonstrates that current system costs are not one of our immediate challenges. In fact, this information supports re-investing in additional resources that would promote system flexibility and adaptation.

Preferred Option

The Working Group recommends a made-in-Manitoba solution that improves on the quality of food, lessens the impact of change on labour, improves safety aspects for patients, recognizes the unique needs of long-term care patients, and applies local leadership and management to shared food services.

The preferred option calls for the development of system food production at Health Sciences Centre and the construction of a secondary meal assembly site at St. Boniface General Hospital to complement meal assembly from the Regional Distribution Facility.

Implementation

Development of a detailed implementation plan is paramount to the success of the new Shared Food Service system. The Working Group identified several issues that must be addressed. The process must enable quantification of additional resources required for service adaptations to meet the diverse food needs of patients and residents. It must ensure development of a management model that promotes system ownership and accountability. And lastly, it must recognize that integration of clinical standards in food service operations is necessary to assure appropriate nutritional care.

This implementation process must include stakeholders and build on the strengths of the current system while correcting shortfalls. Such participation and commitment from all stakeholders will enable development of an effective, efficient *community-owned* Shared Food Service system.

Background Resources

The history behind Shared Food Services is contained in *Appendix G.* The Provincial Auditor's Report contains further details on events leading to the formation of the SFSWG.

Terminology

This report is written in lay language with the use of technical terms (in italics) where appropriate. Important definitions are contained in *Appendix H.*

II. REPORT CONSIDERATIONS

REPORT CONSIDERATIONS

A) Methodology

The Working Group's initial tasks included structuring a methodology for the development of options, creating a vision as framework, and articulating a set of assumptions to guide its members through the analysis of options.

1) Methodology for Development of Options

Option development included an extensive review of the following factors:

- Impact on food quality;
- Additional capital costs and available infrastructure;
- Effect on annual operating budgets;
- Operational complexity;
- Staffing requirements.

Note: All financial projections and requirements for space and equipment were reviewed and validated by two separate teams of independent consultants.

A comprehensive orientation document was developed and can be found in *Appendix D.*

2) Vision and Assumptions

The Working Group created a vision for the new Shared Food Services to provide a frame-work for the development of a comprehensive and evolving system that is flexible and responsive to patients' and residents' needs. The vision described a system that is characterized by cohesive management and consistency in the delivery of patient and resident care. It incorporates principles of *best practice* and continual renewal through benchmarking and peer review.

The Working Group also articulated a set of core assumptions to serve as the underlying principles that must be central to any new system. These assumptions are as follows:

- A patient-focused philosophy best serves patient and resident needs;
- Staff, achieving appropriate qualifications, would come from within the system;
- Operating dollars, capital expenditures and operational complexities would be minimized;
- Existing physical infrastructure such as buildings and equipment would be used wherever possible;
- Food production would follow Hazardous Analysis Critical Control Point (HACCP) principles;
- An approach to management would be devised to strengthen reporting relationships between system and site management;
- Principles of best practice and benchmarking would be used throughout the system to maximize efficiencies;
- Human resources and financial management functions would provide system-wide support to Shared Food Services.

B) Process

As a means of providing thorough analysis, meeting timelines, and accomplishing the magnitude of work ahead, the Working Group established five sub-committees charged with identifying shortfalls and solutions for the new Shared Food Services system. Sub-committees evaluated the areas of options, finance and capital, special needs of Deer Lodge Centre, communication, and clinical needs. The major tasks completed by each sub-committee are as follows:

1) Options Sub-Committee

Reviewed all the possible operational options, from maintaining the status quo to complete "re-engineering" of the system. Also visited other sites in Canada and the United States, commissioned a stakeholders' survey for staff input, and looked at how Winnipeg meal costs compared to other regions of the country.

2) Finance and Capital Sub-Committee

Researched and provided comprehensive financial benchmarks to facilitate evaluation of options. The sub-committee also assisted with the huge task of costing, verifying and re-verifying all of the options. *(See Appendices A & B.)*

3) Deer Lodge Centre Sub-Committee

Looked at the needs of this facility and came up with a recommendation specific to its residents' needs. *(The Deer Lodge Centre report can be found in Appendix C.)*

4) Communications Sub-Committee

Drew up a communication plan for health care staff, patients, residents and the general public.

5) Clinical Sub-Committee

Merged the work of the Clinical Nutrition Partners of Winnipeg into the review process to promote a strong integration of clinical nutrition standards in concert with food service operations.

Key Stakeholder Involvement

Throughout the review, the Working Group made every effort to involve key stakeholders in developing solutions. Initially, this included regular meetings with union representatives to get their input and keep them abreast of options under consideration. During the latter stages of deliberations, the Working Group invited union representatives to the table to attend and take part in all meetings. Two of the unions, United Food and Commercial Workers and Canadian Union of Public Employees, submitted proposals of their own that were evaluated by the Working Group in the same way as all other options.

C) Shortfalls and Solutions

The Working Group examined the current Shared Food System, evaluating its features and pinpointing its major shortfalls. Shortfalls are listed below, accompanied by the recommendations of the Working Group for solving the identified problems with made-in-Manitoba solutions.

Shortfall #1

Lack of availability to source 100 per cent of all food products required

Solution

Food locally cooked by our health care facilities to better serve patients and long-term care residents

The proposed re-introduction of local food preparation is not an attempt to return to a time when individual hospital kitchens cooked all their own food for their own patients *(cook/serve)*. Rather, it represents a genuine effort to create a system that puts the needs of patients and residents first while still maintaining the concept of a shared food service.

In the recommended option, soups, sauces and main dishes would be prepared by what is known in the food service industry as *cook/chill* or two-stage cooking. This is a method already widely accepted as an improvement upon the conventional cook/serve way of providing meals in large institutions. Properly managed, it allows for safe, convenient and efficient preparation of large volumes of food. This alternative allows the safe holding of food for short periods of time without freezing.

The Working Group believes local food production is essential to providing the kind of flexibility necessary to make the system more responsive and improve the quality

of service. With prudent management, system-produced meals are less costly than ready-cooked products. Current practice is to purchase ready-cooked products from commercial food processors.

All options include an analysis of the potential for growth in future production. The options explored involve development of one to three production facilities. Options with more than one production site were rejected as additional production sites added unnecessary capital investment and annual operating costs to the system.

Utilizing cook-chill or two-stage cooking technology, one production site can easily provide food to meet the daily system needs as well as provide a five-day inventory of product to buffer the system in the event of supply shortage. Under adverse conditions, the system can also source commercially prepared products.

For these reasons, throughout its deliberations, the Working Group focused on one production site for the entire system. It saw this as the best means of achieving operational consistency and standardization throughout without duplicating costs.

The Working Group selected Health Sciences Centre as the preferred production location as this site can accommodate the space requirements for regional production. Also, this centre has significant expertise with cook-chill technology. Another factor was the potential for future system retail production at Health Sciences Centre. Health Sciences Centre currently has the largest retail operation among the city's health care institutions.

The tray assembly, on the other hand, is vulnerable due to lack of trayline back up support. (At present, the RDF performs all tray assembly for the system.) For this reason, the Working Group considered meal assembly back up critical in giving the system more flexibility to respond to unforeseen events.

Shortfall #2

Lack of flexibility and responsiveness to client needs

Solution A

A separate menu tailored to the specific tastes of long-term care residents

Long-term care residents account for nearly 40 per cent of total system meal requirements. As well as providing nourishment and enjoyment, the serving of food is a treasured social event of the day. The experience of eating, with all of its associated pleasures, is a crucial aspect in the quality of our residents' lives. Many have lost their independence, and they look to meals as a source of pleasure in life. One needs only to visit Deer Lodge Centre or any of the other long-term care facilities at mealtime to appreciate what food means to the residents. Mealtime – and breakfast in particular – is often the highlight of their day.

The new system must build in ways and means of adapting so that meals can be tailored to specific preferences. A special separate menu would give recognition to this fact, allowing the design of menus that meet patient needs.

Solution B

Greater adaptation of meals for our long-term care residents, taking into account their unique tastes and food choices

Providing long-term care residents with foods they enjoy is important and their food preferences should be respected. That means more "comfort foods" – appetizing fare that looks and tastes familiar to them. For most long-term care residents, breakfast is the meal where their appetite is best and food is most enjoyed. It is important that this window of opportunity to encourage nutritional intake be optimized. Greater system flexibility and adaptation would facilitate this by providing patients with, for example, freshly toasted bread at breakfast time. This solution could be implemented with appropriate additional resources.

Special occasions like birthdays and holidays are examples of times when the system should be able to offer food that more closely resembles the kind of home-style meals associated with those times of the year.

Such adaptations could vary from facility to facility, depending on resident preferences at the long-term care facilities in the system. Additional funding needs to be added to the financial projections for each option to allow for such adaptation. These resources will allow for sufficient flexibility in adapting system-standardized practices that are consistent with the core values of the specific long-term care facility. A home-like atmosphere can be promoted in co-operation with each facility's activities.

It should be noted that some long-term care facilities – while lacking large commercial cooking amenities - already have small kitchens that are used for residents' recreation (i.e. cookie baking and other such activities). These facilities can be used for occasional alternative meals for groups of residents with similar

requests or food preferences not easily accommodated by the system. Recreational programs, for example, could be instituted where residents are assisted in preparation of home-style meals. This recommendation could be implemented with additional resources.

Shortfall #3

Lack of formal integration of clinical nutrition standards within the foodservice operation; and lack of clinical expertise in database development

Solution

Integration of clinical nutrition standards with food service operations

Integration of nutritional standards with food service operations is an absolute requirement. Operational proficiency must be complemented by the expertise of clinical dietitians to ensure delivery of nutritionally appropriate meals compliant to individual care plans.

The need to formally integrate clinical dietitian expertise with the Shared Food Services operations was recognized prior to the start of the SFS Working Group. In October 1999, four clinical dietitians were seconded to work in this crucial area, under the designation of Clinical Nutrition Partners of Winnipeg (CNPW). The team later grew to include three more clinical dietitians. The CNPW's mandate was to identify significant clinical issues that impact on patient care. Further, its members were to detail the steps to correct such issues and ensure necessary integration with food service operations.

After developing detailed work plans, the group began the process of reconstructing a dietary database and implementing CNPW recommendations.

The CNPW continues to guide the process and assist with implementation. The anticipated reconstruction date for the database is January 2001. Full realization of database revisions to patients and stakeholders is scheduled for March 2001, following a comprehensive education program for appropriate stakeholders.

For patients and residents, these processes will result in increased variety of food, improvements in tray and dietary accuracy, plus more stringent controls regarding allergens. Stakeholders in the system will also benefit from the results. Expected improvements include simplified processes, increased efficiencies in the computer system database, assurance of nutritional integrity, and availability of user-friendly references.

Already in the initial implementation stages, systematic attainment of nutritional standards forms the system's backbone of quality assurance. With these changes, hospital patients and long-term residents with special dietary needs can be confident that they will be served nutritionally appropriate meals.

Shortfall #4

Lack of clear roles and responsibilities

Solution

Self-management of the Shared Food Services system

The Shared Food Services Working Group believes the system will benefit from drawing on the considerable local leadership and expertise already working in and familiar with the Shared Food Services initiative. The Working Group believes the system should therefore be self-managed rather than run under an exclusive contract with an external food services management company.

In addition to taking advantage of local abilities, such an arrangement would, furthermore, allow resources now spent on outside management to be re-invested for education and improved training for staff. The Working Group believes this would greatly encourage employee buy-in and ownership of the system.

In order for the new system to meet acceptable service levels, additional resources are required. There must be the means to ensure patients and residents are visited on a regular basis to obtain feedback and advice on continuous improvement efforts. This added communication process would promote valuable dialogue between system service providers and the patients and residents that receive these services, enabling appropriate adjustments.

Shortfall #5

Lack of stakeholder consultation and ownership of the shared initiative

Solution

Consultation with key stakeholders to ensure consistent and ongoing communication and collaboration

It is imperative that the management team of the new Shared Food Service system consult regularly with key stakeholders to support and facilitate food service processes and structure in order to achieve system cohesiveness.

Stakeholders must also be involved in the periodic review of the process and structure as required to address continuous improvement. As well, stakeholders must be involved in standardization of *best practices* policies and procedures related to management for the entire Shared Food Services system.

Shortfall #6

Lack of consistency in staff training and supports; lack of consistency in the delivery of quality product to patients and residents; lack of accuracy of food items on meal trays

Solution

A comprehensive, continuous staff education and training program

Standardizing staff education and training across the system is a vital function for achieving staff competence and consistency in practices. Such a program would build on the current staff knowledge base, increasing confidence and encouraging

problem solving.

To rebuild the system, Shared Food Services needs to reinvest in its employees. It needs to create an organization that is dynamic and able to respond to evolving needs.

D) Cost Surveys

The Working Group was interested in comparing the system costs of Winnipeg Shared Food Services with other facilities across the country. To this end, it developed a survey to capture such costs as food, labour, supplies, and other expenses. In the health care sector, these combined costs are commonly referred as total meal day costs. These costs are inclusive of all meals per day to patients and residents.

Survey respondents provided meal day costs with the understanding that their information was proprietary and their identity would remain confidential.

Three respondents were from regional programs. Two of these respondents had similar patient demographics compared to the Winnipeg system. They were much smaller, however, in terms of meal volume. Winnipeg's meal volume was more than double that of the next largest region.

The survey indicated that local meal day costs are competitive among all respondents *(see Table I)*. In comparing regional systems, Winnipeg had the lowest cost reported at $19.81. This demonstrates that current system costs are not one of the immediate challenges. In fact, these costs reflect that the system could re-invest in additional resources to promote system flexibility and adaptation.

It is important to note that the Winnipeg system includes costs not normally reported in traditional meal day reports. Included in Winnipeg's meal day reports are the costs of owning a stand-alone food service facility. These costs are for such items as heat, light, grounds keeping, and property taxes. In traditional settings, these costs are associated with health care administrative costs and are not allocated to the food service department.

Food costs in the Winnipeg system were the highest compared to the other regional models and were the second highest of all respondents. The Winnipeg model is the only system with 100 per cent out-sourced food product.

The Working Group believes that reintroducing local production will reduce system food costs. Labour costs in Winnipeg were the lowest of all respondents.

TABLE I **Patient Food Services – Costs**

SURVEY RESPONDENT	LABOUR incl. benefits per-Meal day	FOOD COST per-Meal day	SUPPLY COST per-Meal day	TOTAL COST per-Meal day
1	13.74	8.94	1.77	$24.45
2	17.03	6.59	0.83	$24.44
3	13.96	8.33	1.30	$23.59
Winnipeg	7.98	9.29	2.36	$19.81

E) Stakeholder Survey

The Working Group commissioned a survey of hospital staff and other stakeholders in the spring of 2000 to gauge their perceptions of the shared food services system. The Working Group also wanted to hear their recommendations to improve the system.

The 675 respondents to the Pele Research and Consulting Survey included hospital nurses, physicians, clerks, dietary staff and senior executive staff who have direct contact with the food system. *(See Appendix F.)*

Despite sweeping criticisms of the shared food service overall, many staff noted some redeeming strengths. Many indicated that food was typically the right temperature and delivered on time. Sixty per cent said the training received to support their role in the system was satisfactory, and about half agreed meals were easy to handle. As well, some agreed quality and variety were acceptable.

Criticisms of the system tended to centre on concerns about food quality and nutritional value. Many respondents asserted food was typically unsavoury in terms of appearance and texture, or was often overcooked.

Only 31 per cent were very satisfied with the appearance of the meal tray. Almost half of the respondents indicated that trays did not have a good appearance. Comments predominantly related to the food rethermalization process (for example, dried out appearance, crusted soup rings, dried and curled meat).

Other weaknesses identified pertained to communication. For example, respondents said it either took too long to respond to recommendations or worthwhile changes were not implemented at all. Among the recommendations for improvement from staff were suggestions relating to tray accuracy and special dietary needs.

On reviewing the survey findings, the Working Group made a series of recommendations that need to be addressed through the development of a systemic management model. *(See Shortfall #4 and Solution.)*

Survey Recommendations

- Implement a customer service representative program with customer service training throughout the system;
- Review problem-solving mechanisms at facilities to ensure timely responsiveness to patient and resident needs;
- Develop rethermalization techniques and standards for re-heating meals;
- Develop essential training checklists for each position, with prescribed training for all new staff;
- Ensure education and training of the CBORD computer system so that "next meal" requests are accommodated.

F) Deer Lodge Centre

Another major focus for the Working Group was Deer Lodge Centre and how it should fit into the system.

Acting on persistent complaints from residents, their families, and staff, and with the support of Health Minister Mr. D. Chomiak, Deer Lodge Centre established its own working group in late 1999 to see how it might change to better meet its residents' needs.

From the beginning this group agreed to have its plan considered as an additional option. *(See Appendix C for Deer Lodge proposal).*

It recommended a self-contained solution that would see Deer Lodge procure, prepare, serve and deliver food on site. The centre's beltlines would be reconfigured to permit two kinds of production and service: cook/serve for breakfast and cook/chill for lunch and dinner.

The Deer Lodge Centre plan had an estimated capital cost of more than $3 million. The plan was examined in detail by the Working Group as an add-on to any of the options it had on the table. Adding this plan would increase system costs ranging $1.2 – 1.8 million to any of the options described. This stand-alone proposal would result in a two-tier system – one for Deer Lodge residents and another for all other long-term care residents. Although this was contrary to the Working Group's mandate and vision, the Deer Lodge Centre proposal proved most useful as it provided an opportunity to focus on identifying the needs of long-term care residents in all facilities. It also was largely instrumental in bringing forward recommendations for a separate menu and the need for system adaptability for the residents living in long-term care facilities.

III. SELECTED OPTIONS

SELECTED OPTIONS

Following are brief descriptions of the five options selected by the Working Group. The Working Group viewed these options as being most feasible for reconfiguring the system to provide better service to all stakeholders and clients. Please refer to *Tables IIIA and IIIB – Selected Options*, following, for a summary of each option.

Of the fifty-seven options explored, the five described below meet all selection criteria established by the expert group. *(See Appendix A for base assumptions in costing options.)*

While the five options selected by the Working Group were more cost-effective than other options, the Working Group determined that money alone would not be the deciding factor in selecting the best system for our patients and residents. Option development included an extensive review of the following factors:

- Impact on food quality;
- Additional capital costs and available infrastructure;
- Effect on annual operating budgets;
- Operational complexity;
- Staffing requirements.

The Working Group stresses that each option is unique and complex. The options are therefore presented as stand-alone systems. Changing parts of one option and adding to another without the in-depth knowledge of the expert group could result in operational, clinical or financial deficiencies.

Table II **Criteria for Development of Preferred Options**

1) Impact on food quality	The issue is quality of food depending on: a) how it is produced and served b) where it is produced c) specific patient/resident needs
2) Additional capital costs and available infrastructure	Additional capital costs should be minimized
3) Effect on annual operation budgets	Additional operating cost should be minimized
4) Operational complexity	A greater number of sites for production/traying and a greater amount of food handling/movement creates an increased risk of error for food production and serving to patient/residents. Therefore, higher operational complexity yields a less attractive option.
5) Staffing requirements	All options have differing amounts of total EFT's and involve some movement or change in job function. The minimization of job loss and staff disruption was therefore considered.
6) Back-up capabilty	Where the system solely relies on one production and/or one traying site, there is increased risk of disaster due to site failure. In the case of a production site failure, there is ability for the system to outsource food. Tray assembly failure should be mitigated.
7) Ability to easily develop additional capacity	Should the hospital system face increased pressure on in-patient days, the food production system would need to adapt. Easier adaptation to increase capacity is an asset.

The Five Options

1) **The preferred option**

   Health Sciences Centre producing food for all facilities.
   St. Boniface General Hospital would tray for itself as well as for HSC; the Regional Distribution Facility (RDF) would do the balance of meal assembly.

   Of all these options, this is the least complicated system to manage. It is also more flexible and offers more growth potential – up to 700 additional trays per meal. This option allows more back-up for meal assembly than the original Shared Food Services plan with one traying site.

   The advantage here is that meal assembly for the two tertiary hospitals would be done at the same location allowing for last minute menu changes at those sites. In case of contingency, each site will be large enough to add additional shifts to produce meals for other sites.

   The downside to this option is that is it slightly more expensive to operate. This option is $2.5 million more than the current system and is about $1.1 million more than the operating benchmark of $31.6 million. This latter figure is the estimated cost of adding Health Sciences Centre and St. Boniface General Hospital into the Shared Food Service system with meals assembled at the RDF.

   All factors considered, the Working Group concluded that this option is preferred.

2) **Health Sciences Centre providing food for all facilities; St. Boniface Hospital assembling meals for its patients and the RDF assembling meals for HSC and the balance of the system.**

Renovating St. Boniface General Hospital's kitchen for only itself will provide slightly less back up for the system. Although this option is less costly than other options, it provides less flexibility than the preferred option. Furthermore, it provides no growth potential for the system. Another important consideration is that this option brings the ware-washing area at RDF to capacity and future expansion could only be accommodated through additional capital investment.

3) **Health Sciences Centre producing food for all facilities and development of meal assembly sites.**

St. Boniface General Hospital and Deer Lodge Centre would tray for themselves and the RDF would assemble meals for HSC and the remaining sites. As this option contains three assembly sites, it has the advantage of offering more back up in the event of system failure. Three assembly sites maximizes flexibility for contingency. As well, this option requires less off-site transportation for Deer Lodge Centre and St. Boniface General Hospital. This option, however, has more individual site activity and is therefore more complicated to manage. Adding additional assembly sites for small volumes is more expensive and less efficient than previous options. This model can accommodate future growth in meal assembly up to 200 trays per meal.

4) Health Sciences Centre producing food for all facilities; both Deer lodge Centre and St. Boniface General Hospital assembling all system meals.

This model requires dismantling the RDF and transferring approximately 65 per cent of the systems meal volume to SBGH. Another 35 per cent would go to Deer Lodge Centre. Space availability at DLC will be an important issue to contend with as less than ideal spacing is available. Also, closing the RDF would be like starting over again, requiring re-creation of systems already developed.

Although Deer Lodge Centre had indicated it was ready to be part of the system, officials there indicate there is little support from Deer Lodge Centre for system meal assembly. As well, there is concern that there would be community resistance due to increased truck traffic in the neighborhood. This option requires greater road activity due to transportation of meals to other facilities.

Although annual operating costs were about $32 million, the additional capital requirements were among the highest of all the options considered.

5) The RDF producing food for the system and assembling meals for the entire system.

This option fully centralizes patient food service at the RDF, maximizing management efficiency and standardizing practices. This option, however, lacks flexibility and increases risk in responding to unforeseen events, most importantly, system failure. These issues had high value placed on them by the Working Group. As the provincial auditor noted in his recent review, there have

been numerous near misses, and the group was adamant that it err on the side of caution.

There is no growth potential in this option. Furthermore, the current structural design and configuration of the RDF is not conducive to the magnitude of expansion required for this option.

TABLE III A Selected Options

DESCRIPTION	Additional Capital Costs (Millions)	Annual Operating Costs (Millions)*	Estimated Timeline for Construction (Months)	Estimated Jobs Loss (Positions)
The Preferred Option **1.** HSC producing food for the system. SBGH assembling meals for both SBGH and HSC. The RDF assembling meals for the remaining system.	$15.2	$32.7	21	15
Other Options **2.** HSC producing food for the system. SBGH assembling meals for SBGH. The RDF assembling meals for HSC and the balance of the system.	$12.3	31.6	11	15
3. HSC producing food for the system. SBGH assembling meals for SBGH. DLC assembling for DLC. The RDF assembling meals for the balance of the system.	$13.8	32.6	11	19
4. HSC producing food for the system. SBGH assembling meals for 2/3 of the system and DLC assembling meals for the remaining 1/3 of the system. Dismantle the RDF.	$27.8	32.0	30	66
5. RDF producing food for the system and assembling meals for the entire system.	$7.2	30.7	13	38

*** Note: Operating costs include debt repayment for the capital investment.**

TABLE III B Selected Options: Advantages and Disadvantages

Description	Advantages	Disadvantages
The Preferred Option 1. HSC producing food for the system. SBGH assembling meals for both SBGH and HSC. The RDF assembling meals for the remaining system.	More flexibility Offers more growth potential – up to 700 additional trays per meal More back-up for meal assembly than the original SFS plan which has only one tray assembly site Meal assembly for the two tertiary hospitals would be done at the same location allowing for last minute menu changes at those sites. Both HSC & RDF are large enough to function for the other should contingency plans be required Job loss is minimal compared to other options	Operating costs slightly higher (The original SFS plan which included HSC & SBGH receiving meals from the RDF would cost $31.6 M based on 1999-2000 actuals)
Other Options 2. HSC producing food for the system. SBGH assembling meals for SBGH. The RDF assembling meals for HSC and the balance of the system.	Less costly than other options Minimal job loss	Less flexibility No growth potential Less back-up (extra tray assembly has limited capacity) Brings the ware-washing area at RDF to capacity, therefore future expansion could only be accommodated through additional capital investment
3. HSC producing food for the system. SBGH assembling meals for SBGH. DLC assembling for DLC. The RDF assembling meals for the balance of the system.	Calls for three tray assemblies, thus offering more back up in the event of system failure Future growth potential in meal assembly up to 200 trays per meal Less transportation for DLC & SBGH	Multiple site activities are more complicated to manage Adding additional tray assembly sites for small volumes is more expensive, less efficient and less effective than options 1 & 2

Description	Advantages	Disadvantages
4. HSC producing food for the system. SBGH assembling meals for 2/3 of the system and DLC assembling meals for the remaining 1/3 of the system. Dismantle the RDF.	Annual operating costs $32 M	Requires dismantling the RDF (loss of $12 M investment) Approximately 65% of the system's meal volume to be transferred to SBGH and 35% to DLC Space availability at DLC less than ideal Closing RDF requires re-creation of 34,000 sq. ft. infrastructure DLC indicated there is no support for system meal assembly Capital requirements among the highest of all the options considered
5. RDF producing food for the system and assembling meals for the entire system.	This option fully centralizes patient food service at the RDF, maximizing management efficiency and standardization of practice Lowest operating cost of five options	Lacks flexibility and increases risk in responding to unforeseen events (One tray assembly site for entire system) Current structural design and configuration of the RDF is not conducive to the magnitude of expansion require for this option No growth potential in this option More than double the job loss of Option 1

IV. MANAGEMENT MODEL

MANAGEMENT MODEL

The Working Group has concluded the current Shared Food Service management model must be reviewed.

There is considerable management expertise already in the system. Competent clinical and operational food service professionals are well acquainted with the complexities of a system that must balance what is best for the organization as a whole with the perspectives, concerns and needs of stakeholders.

As discussed in the section on shortfalls and solutions, the Working Group holds the opinion that a fundamental change from external management to a self-managed model is crucial. Strong, visionary local leadership would gain crucial employee buy-in and a sense of ownership by all employees to make the system function more smoothly. Full co-operation and support by staff are paramount if the system is to improve, and the move to local management would signal a new start by recognizing the expertise of local leadership talent. This management model should apply across the entire organization, including clinical, operational and financial functions.

By taking control in this manner, the system would be able to re-invest resources now spent on an exclusive management contract with an external food services management company. These monies could be used to reinvest in the system's own employees. Specifically, there would be more dollars for education and training, thereby enhancing system ownership and ultimately improving service to patients and long-term care residents.

Decision-makers would need to develop a clear vision of what a Shared Food System looks like and how it should function, with integrated food service and clinical leadership to ensure consistent standards regionally.

It is recommended that site managers have dual responsibility to the specific facility and to a system manager to promote cohesiveness and to practice consistency. Clearly defined roles of site and regional responsibilities are required in developing appropriate partnership and teamwork.

Food service operations and clinical nutrition standards must be strengthened and formally integrated. As well, any new management model should include a prescribed interaction between stakeholder and patients or residents through, for example, stakeholder groups.

Management would be financially accountable for the system, and there would be clear reporting relationships.

A change from contract management to self-management is very significant. It requires an implementation plan of its own to achieve the transition successfully.

V. IMPLEMENTATION

IMPLEMENTATION

The Working Group's mandate does not include the preparation of an implementation plan. Nonetheless, the group felt its purpose extended to identifying several critical factors essential for successful implementation.

The development of a comprehensive implementation plan must include an appropriate budget and allocation of sufficient resources for service adaptations to meet the diverse food needs of patients and residents.

The implementation plan requires a management model that promotes system ownership and accountability.

Furthermore, it must plan for and allocate resources towards the integration of clinical standards in food service operations, assuring proper nutritional care.

The implementation plan must be thorough and detailed, building on the strengths in the present system and correcting its shortfalls.

The plan must be devised within the framework of a made-in-Manitoba vision and industry best practices. This planning process must include stakeholders. Their participation will be invaluable in developing an effective *community owned* Shared Food Service system that meets current needs, yet is flexible enough to serve our patients and residents in long-term care facilities well into the future.

APPENDIX A

Base Assumptions Used in Costing Options

Appendix A

Base Assumptions Used in Costing Options

1) Annual volume of meals used in the options is 4,345,000, which is the estimated required number of meals for the nine Winnipeg hospitals and three personal care homes (Concordia Place, Misericordia Place and Calvary Place).

2) The costs in the options are based on 1999/2000 prices and 1999/2000 wage rates for comparison purposes with the base year. When the selected option is implemented, the actual cost of the option will therefore be higher than costs presented on the comparison worksheet. For example, salary costs generally increased by two per cent in 2000/2001 and food costs increased by three per cent in 2000/2001 and these costs are not reflected in the cost estimates provided.

3) Each option includes the development of a long-term care menu and related costs.

4) Figures provided include Aramark-associated costs including management fees, purchased management salaries and reimbursable costs.

5) Delivery of meals to patients is unchanged from the current practice at each of the 12 facilities.

6) Each option will result in one-time and/or transitional costs. No provision for these costs is included in any of the options.

7) Additional debt servicing costs are based on an interest rate of seven per cent with a 20-year amortization period.

8) If an option does not include use of the RDF then it is assumed that the RDF could be sold for $2 million, with the proceeds reducing any additional new capital costs required in the applicable option.

9) Generally, expenditure levels – unless directly related to meal volumes or unless specific adjustments are known – are unchanged from 1999/2000 levels.

10) All capital cost projections include construction, design fees, bridge financing and food service equipment based on Class D conceptual cost estimates.

APPENDIX B

Options Comparison Worksheet: Cost Adjustments

Appendix B

Options Comparison Worksheet: Cost Adjustments

1) **Salary costs**
   Two per cent increase for 2000/2001 and any applicable increase in subsequent years.

2) **Food costs**
   Three per cent increase for 2000/2001 and any applicable increase in subsequent years.

3) **G.S.T.**
   Potential decrease in G.S.T. expense at RDF.

4) **Contingency expense**
   The costings of the various options do not include any contingency expense; perhaps a contingency expense of one to two per cent should be considered.

5) **Additional costs for training expense**
   Either RDF or residual costs at facilities.

6) **Additional integration costs**
   Any additional costs relating to vertical integration or service representative costs that may ultimately be recommended and implemented.

7) **Changes in management costs**
   Depending on the management structure, there may be additional costs not currently incurred in the system or a reduction to present system costs.

8) **Start-up costs**
   For each option, there will be one-time start up costs and/or transitional costs. The costs in the first year of implementation will therefore increase accordingly.

9) Debt servicing costs

Depending on interest rates, debt servicing costs may increase or decrease compared to the debt service costs reflected on the worksheet.

10) General inflationary costs

Other than food and labour costs, as discussed above, general inflationary increases on other costs may increase costs.

11) Rebates

There may also be an opportunity to reduce food costs through volume rebates and/or increased volumes.

APPENDIX C

Deer Lodge Centre Proposal

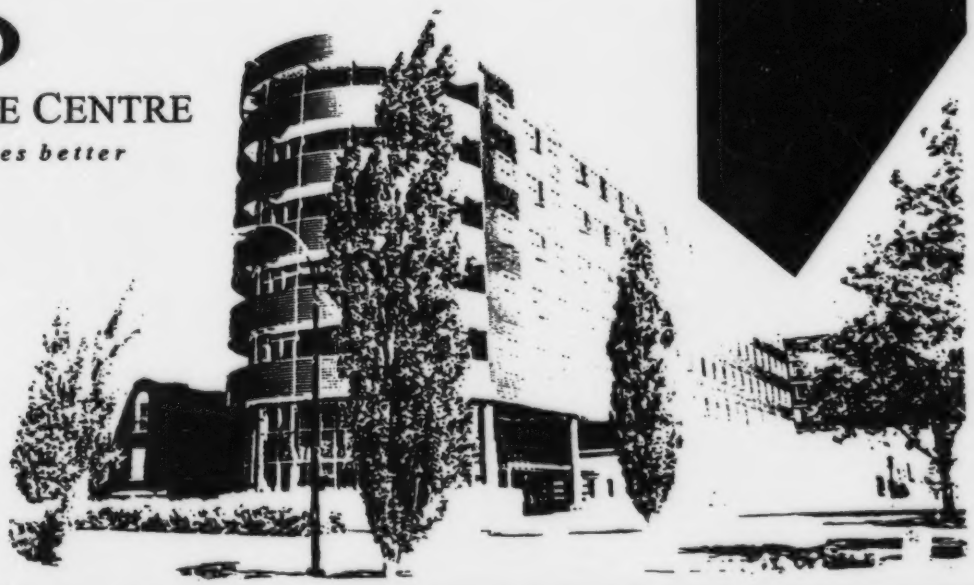
DEER LODGE CENTRE

Shared Food Services Work Group

Interim Report April 14, 2000

DEER LODGE CENTRE

Making lives better



INDEX

	EXECUTIVE SUMMARY	2
	INTRODUCTION	3
I	PURPOSE	3
II	IDENTIFICATION OF OPTIONS	3
III	DESCRIPTION OF OPTIONS	4
IV	DETERMINATION OF THE PREFERRED OPTION	6
V	RATIONALE FOR ACCEPTING THE PREFERRED OPTION	7
VI	KEY SUCCESS FACTORS AND ASSOCIATED RISKS	8
VII	RECOMMENDED PLAN OF ACTION	10
VIII	PRELIMINARY OPERATING BUDGET	11
IX	COMPARATIVE ANALYSIS OF OPERATING COSTS	12
X	DRAFT CAPITAL BUDGET	12
XI	RECOMMENDATIONS	13

ATTACHMENT 1
SHARED FOOD SERVICE WORKING GROUP ASSUMPTIONS & CRITERIA 14

ATTACHMENT 2
FACILITY PLANNING AND CONSTRUCTION SCHEDULE 15

ATTACHMENT 3
IMPLEMENTATION PLAN 16

ATTACHMENT 4
DRAFT OPERATING BUDGET 17

ADDENDUM TO ATTACHMENT 4
DRAFT OPERATING BUDGET 18

ATTACHMENT 5
DRAFT CAPITAL BUDGET 19

EXECUTIVE SUMMARY

The Deer Lodge Centre Shared Food Services Work Group began the process of determining food service change options for Deer Lodge in January 2000. The Interim Report builds on the work presented in the Preliminary Report tabled to the Board on February 22, 2000. The preliminary report identified several food service change options. We then solicited feedback from residents, patients, families and staff with regard to their perception of the current food service. Finally, the options were reviewed with the city-wide Shared Food Service Work Group.

We recommend the Board accept Option 3B: Site production with site tray and dine service as the preferred food service change option for Deer Lodge. We further recommend that once Government approves the recommendation that the Board authorizes Administration to proceed. This option would see Deer Lodge Centre procuring, preparing, serving and delivering food on site. The option recognizes Deer Lodge Centre's potential to expand production to serve other sites through the Regional Distribution Facility for the provision of both regular and texture modified foods. The option is recommended as it meets the following essential criteria:

- Places the focus on the resident by incorporating principles of best practice.
- Provides flexibility to the shared food service system by allowing for the potential of growth.
- Minimizes capital expenditure requirements
- Maximizes labour and equipment efficiency
- Insures Deer Lodge Centre continues to be a part of the shared food services system.

The option would require a capital investment currently estimated at $3,029,609. The main kitchen requires renovation only to the extent necessary to accommodate the new equipment to allow for two-stage cooking. This will provide the capability of producing food for other long term care clients through the Regional Distribution Facility. The preliminary operating budget is $3,834,417. This compares to our current cost of $4,143,862.

The minimum time required to renovate the Deer Lodge kitchen is estimated at seven and one-half months following government approval. The renovation schedule will allow for the patient and retail food service operations to be accommodated.

INTRODUCTION

The Deer Lodge Centre Shared Food Services Work Group was brought together January 21, 2000 to recommend changes to the current patient food service at Deer Lodge Centre. Change options were to include the potential of Deer Lodge providing food products to other shared food service sites. The Deer Lodge group has worked in concert with the city wide Shared Food Service Working Group, chaired by Hubert Gauthier, Chief Executive Officer of the St. Boniface General Hospital.

The Deer Lodge committee's membership consists of various internal stakeholders representing residents, nursing, labour, dietary and administration. External stakeholders are represented as well, with linkages to Manitoba Health, the Winnipeg Regional Health Authority and the city wide Shared Food Service Working Group.

I PURPOSE

The purpose of this report is to provide a recommendation for a change to the food service at Deer Lodge Centre. This Interim Report builds upon the work presented in the February, 2000 Preliminary Report. Specifically, the Interim Report provides information with regard to:

- The process of determining the preferred food service change option featured in the preliminary report.
- An assessment of the key success factors and associated risks in implementing the preferred option.
- Preliminary operating and capital cost expenses.
- Projected implementation tasks and timelines.
- Recommended plan of action.

II IDENTIFICATION OF OPTIONS

As noted in the preliminary report, the Deer Lodge Centre Work Group developed a number of potential food service scenarios to show the various possibilities of providing a changed food service. There were roughly twelve variations upon a few central themes. The central themes were grouped as follows:

1. Site Production with site tray and dine service utilizing pre-1998 technology.

2. Site production with trays received from the Regional Distribution Facility (50/50 Plan).

3A). Site production with site tray and dine service utilizing current technology for Deer Lodge Centre.

3B). Site production with site tray and dine service utilizing current technology for Deer Lodge Centre with the potential to expand production to serve other personal care home sites.

All options include the potential for Deer Lodge Centre to develop a method to produce texture modified foods in a visually appealing form. This would involve research into the development of a technique to produce pureed and minced items that hold their appearance in an appetizing manner. These items could be shipped to the Regional Distribution Facility for delivery to all Shared Food Services sites.

III DESCRIPTION OF OPTIONS

All options assume we would maintain the current mode of service delivery, i.e. tray and dine service.

Option 1 ***Site Production with site tray and dine service utilizing pre-1998 technology.***

This option would be the previous food service that was in place prior to the introduction of the Shared Food Services system. It is commonly described as "cook-serve." Cook serve kitchens procure foodstuffs from local vendors and store on-site. These foodstuffs are a combination of fresh, frozen, processed, raw, dry and canned goods and are usually prepared on the same day that they are required for service. Since the product is prepared and served on the same day this method of production is also referred to as one-stage production.*

After all menu items are prepared, they are placed in hot or cold holding cabinets. Items are then transferred to a hot or cold table on the trayline where they are then portioned onto patient trays. Dinner and supper menu items may be held in these cabinets and holding tables up to four hours prior to trayline portioning. This is due to the large amount and variety of the required dinner and supper products.

The breakfast menu features less variety (i.e. eggs, cereal, and toast). These types of items are well suited for small batch cooking. As a result, they are prepared and delivered to the trayline just prior to portioning. Holding time for breakfast products are minimal. Patient trays are then loaded into a cart for transport to the unit.

**Footnote*

(There were exceptions to this general rule. Roast beef, for example, was cooked the day before it was required for service. It was cooked, sliced, panned and placed in a refrigerator overnight. The following day, it was removed from refrigeration and placed in a steamer until thoroughly heated. Then it was brought to a holding cabinet until the product is ready to be served on the beltline).

Option 2: ***Site production with trays received from the Regional Distribution Facility (50/50 Plan).***

This option describes a possible hybrid system whereby Deer Lodge would produce soups, entrées, starches and vegetables on site. All other required foodstuffs would be received from the Regional Distribution Facility (RDF). Thus, patient trays would be received containing dessert, salad and sandwich items to which we would "marry" the above "hot" items. Items received from the RDF might be portioned or have packaging removed by Deer Lodge Centre staff.

Option 3A: ***Site production with site tray and dine service utilizing current technology for Deer Lodge Centre.***

Options three "A" and "B" refer to a food service where food would be prepared at Deer Lodge Centre using a "two-stage" system. As in the one-stage system described above, we would purchase various food ingredients in a variety of states - fresh, frozen, raw, processed, dry and canned. These products would be stored in dry, refrigerated and frozen storage areas in the main kitchen. Ingredients for standardized recipes would then be weighed, measured and assembled.

Breakfast items would be prepared just prior to the breakfast service. Ingredients for dinner and supper recipes would be prepared ahead of when they would be required for service. In other words, the dinner and supper menu items would be cooked according to an inventory schedule. They would be placed in inventory until they would be required for service - typically two to three days later.

Two-stage cooking technology allows for safe, convenient and efficient preparation of large volumes of food without freezing. Two-stage cooking is a term used to describe the method of taking cooked food, rapidly cooling it to a temperature of 4 degrees C then holding the food at this temperature. Since microbes grow rapidly between 4°C and 60°C two stage cooking dictates initially cooking food products to 82°C. This has the effect of killing most food borne organisms and microbes. The product is then rapidly chilled through the "danger zone" and stored as close as possible to the freezing point where bacterial growth is the slowest.

Option 3B: ***Site production with site tray and dine service utilizing current technology for Deer Lodge Centre with the potential to expand production to serve other personal care home sites.***

Should Deer Lodge Centre produce menu items for the Regional Distribution Facility, these items would be prepared and shipped in a bulk form. The existing Regional Distribution Facility transportation network would be utilized for transporting these products. This option is consistent with the original Shared Food Service vision of having up to twenty percent of the system's food requirements produced using two-stage production at an existing facility.

IV DETERMINATION OF THE PREFERRED OPTION

These options were brought forward to the city-wide Shared Food Service Working Group. The options were analyzed using the essential criteria (Attachment 1: Shared Food Service Working Group Assumptions and Criteria) developed by the city-wide group. Options that did not meet all essential criteria were eliminated.

The recommendation to look to Deer Lodge as a potential production site for long term care has not yet been fully evaluated by the Shared Food Services Work Group. As such, any additional cost that may be incurred, whether labour, supply or information technology is excluded from this report.

Option 1 - Site Production with site tray and dine service utilizing pre-1998 technology ***did not meet the following criteria:***

Principles of Best Practice:

- The serving temperatures of foods produced in a one-stage system are often under the acceptable minimum of 60°C. This is due to the length of time the product is held prior to service. In a large one-stage system such as Deer Lodge, dinner and supper menu items often are made several hours in advance of the mealtime.
- The quality of the dinner and supper products tends to deteriorate, again, due to the long holding period.

Maximization of efficiencies throughout the system:

- Cooking to meal times necessitates having cooks staff producing product between the hours of 0530 to 1730. The result is long periods of down time due to the peaks and valleys of the production schedule.
- Labour efficiency is compromised for both production and service personnel. One stage cooking requires the same staffing patterns seven days a week. In addition 1½ shifts per day are required to produce the three meals as opposed to 1 shift per day to produce three meals in a two-stage system.

Potential for growth of healthcare sector in Manitoba:

- A one-stage system does not afford growth potential to serve other segments of the shared system in a safe and economical manner.

Option 2 - Site production with trays received from the Regional Distribution Facility (50/50 Plan) ***did not meet the following criteria:***

Users clearly rejected the current system identifying concerns with the taste and variety of the food in all menu categories. In addition, those patients receiving the tray service had significant issue with the amount of packaging received on the tray.

Option 3A- Site production with site tray and dine service utilizing current technology for Deer Lodge Centre ***did not meet the following criteria:***

Potential for growth of healthcare sector within Manitoba

- The direction received from the city-wide Working Group is to find solutions for long term care. A pure stand-alone option would not address this need.

Option 3B **- Site production with site tray and dine service utilizing current technology for Deer Lodge Centre. This option recognizes Deer Lodge Centre's potential to expand production to serve other sites through the Regional Distribution Facility both regular and texture modified foods.**

This option was selected by both the city-wide Shared Food Service Work Group and the Deer Lodge Centre Work Group as the preferred option meeting all essential criteria.

V RATIONALE FOR ACCEPTING THE PREFERRED OPTION

Option 3B was selected as it meets the following criteria:

Principles of 'Best Practice'

✓ **Safe product**

The processes involved in two-stage cooking ensure that the food served is at the proper temperature. Food production is linked to an inventory cycle as opposed to meal times. Instead of preparing all food products just before meal service, products are prepared and placed in inventory. Just prior to the meal required they are taken from inventory and heated to the appropriate serving temperature. The primary difficulty with respect to keeping foods attractive and at the right temperature with a one-stage cooking process is that foods must be held for long periods of time prior to service. This has a detrimental effect on the organoleptic qualities of the product - taste, odour, texture and appearance. Quality and consistency of the finished product when utilizing a two-stage process is improved by the use of more controlled production techniques.

✓ **Menu flexibility**

As a two-stage process is one utilizing advance production techniques should a raw product not be available on the day required, it would not have an impact on meeting the menu requirements of the day. The quality of food purchased will require enhancement in order to achieve the efficiency of a two stage cooking system. The issue of raw food quality is linked to the system's ability to produce a safer product. This is due to the two-stage system's requirement of pasteurizing the food prior to placing it in inventory. The additional food cost is referenced in Attachment 4: Draft Operating Budget. Again, contrasting this to a one-stage process, should a raw product not be available, then a menu substitution is required. The two-stage process builds in the flexibility to work around supply chain difficulties.

A patient focused philosophy

✓ **Texture modified diet requirements will be better met** with the development of a process to provide attractive pureed and minced diets.

Maximization of efficiencies throughout the system

✓ **Labour & equipment efficiency**

The main advantage of two-stage cooking is the flexibility in the timing of cooking and tray assembly tasks. Food can be prepared, cooked and trays assembled independently of meal times. This permits these processes to be designed for maximum efficiency. Two-stage cooking allows most food production to be scheduled during one eight hour period. This contrasts with the necessity of cooking over a twelve-hour period when utilizing a one-stage production system. The result is efficient utilization of skilled cooks' labour and specialized equipment when employing a two-stage production system.

✓ **That capital expenditure will be minimized**

As the system has purchased the rolling stock, dishware and other ancillary equipment, Deer Lodge is in a position to continue to use these items without the need for further capital expenditure for these items. Capital dollars are required for the renovation of the Deer Lodge kitchen to accommodate two-stage cooking.

Potential for growth of healthcare sector within Manitoba

Two-stage cooking allows the Shared Food Services system the opportunity to provide foods to personal care homes such as Calvary Place.

VI KEY SUCCESS FACTORS AND ASSOCIATED RISKS

This section details an assessment of the risks, opportunities, and barriers associated with the successful implementation of the preferred option.

Key Factor #1: ***IMPLEMENTATION TIMELINE***

A successful implementation must be accompanied by a detailed transition plan. The key challenge will be the delivery of the new service in a timely manner. We believe that Deer Lodge Centre residents will anticipate a prompt change in food service once a final decision on the change option is announced. In addition, the transition plan must take into account the challenges associated with maintaining production for Retail Food Services while the kitchen undergoes renovations.

Risk:

- *The transition must balance sound operating practice in relation to customer expectation. If this requirement is not met we risk delivering a substandard service.*
- *That the renovated facility allows for the reconfiguration of the beltline to permit both a one-stage (breakfast) and a two-stage (dinner and supper) mode of service.*

Key Factor #2: ***RECRUITMENT OF CORE TEAM***

A key factor is our ability to successfully recruit the personnel required to plan, organize, direct and operate the new facility. The most optimistic timeline would see the core team (Manager, Food & Nutrition Services, Production Manager, Project Dietitian and Equipment/Recipe Specialist) in place by August 2000. This assumes we are in a position to recruit effective May 1, 2000. Of equal import is our ability to recruit skilled cooking and serving personnel to support the core team.

Risk: · *Our ability to source the experienced personnel we require to develop this system. It will be a challenge to find qualified experienced personnel. This will have significant impact upon meeting a deadline.*

Key Factor #3: ***RECIPE DEVELOPMENT AND TESTING***

Once in place, the core team would begin the work on the above major tasks to test and implement the system. A critical success factor is the ability to develop and test recipes. The equipment necessary for recipe testing will take a minimum of two months to order and install. This means that recipe development may begin in September 2000 at the earliest.

Risk: · *Exact timelines for recipe development are unknown at time of writing. It is expected that recipe development will fit into the recommended timeline.*

· *Recipes will require ongoing re-development. That is, the recipe testing phase will be on small batches of product. As we ramp up production, recipes and procedures will require redevelopment for larger batches of product.*

· *Custom modification to equipment may be required. Any such customization will have impact upon our ability to bring the project in on time.*

· *The production logistics associated with producing product in house (i.e. provision of food for retail services and cooking breakfast for patients and residents) while the two-stage system is being constructed will be challenging. At a minimum, menu selection will be compromised.*

Key Factor #4: ***INFORMATION SYSTEM REQUIREMENTS***

The ability to develop information systems to handle menu processing and food production tracking is critical. Additional software modules are required to support a production kitchen. This training must be sourced directly from the vendor, CBORD. The industry standard average time required to develop and implement such systems is twelve months.

Risk: · *The CBORD information system is a backbone of the project. Our ability to ensure the proper transfer of this key knowledge skill set is critical. The complete CBORD information system must be in place by March 26, 2001. Should we fail in this area the project will be compromised.*

VII RECOMMENDED PLAN OF ACTION

The staff recruitment and production development milestones associated with the implementation of the preferred option are presented below. Facility planning and construction timelines are outlined in Attachment 2.

Staff Recruitment:

The human resource required to transition from the current service to the new model begins with the assembling of the core management Food & Nutrition Services team. At a minimum, new personnel required include a Manager, Food & Nutrition Services, a Production Manager, a Project Dietitian, a Project Diet Clerk and an Equipment /Recipe development specialist (the latter two positions are one year terms). We are currently searching for a Manager, Food & Nutrition Services and hope to fill this position by May 15, 2000. Should approval to begin the search for a Production Manager and Project Dietitian be received by the beginning of May, we would anticipate having these staff in place for August 2000. We anticipate contracting with the successful equipment vender to source the equipment/recipe development specialist.

Milestones:

The following milestones must be reached in order to provide the new breakfast service by November 2000 and the complete new food service by April 2001:

18 April 2000	· Presentation to the Deer Lodge Centre Board of Directors for approval.
20 April 2000	· Presentation to city-wide Shared Food Service Work Group.
25 April 2000	· Commence internal communication to Deer Lodge Centre stakeholders.
1 May 2000	· Approval and announcement by Manitoba Health.
27 June 2000	· Presentation of final operational plans and budgets to the Deer Lodge Centre Board of Directors.

Chronological Implementation Plan:

1 May 2000	· Recruitment of core Food & Nutrition services team commences. · Facility planning and construction commences.
24 July 2000	· Core Food & Nutrition services team commences employment. · Menu development commences.

11 September 2000	· Menu development complete. · Commence recipe development. · Commence information system planning. · Commence production and service schedule planning. · Commence development of the food service education plan for staff.
9 October 2000	· Breakfast recipe development and testing complete. · Development of standardized dinner and supper recipes commences.
6 November 2000	· Facility planning and construction complete. · Breakfast provided to all units using the one-stage system commences.
7 January 2001	· Deliver food service education to Food & Nutrition and Nursing staff.
5 February 2001	· Development of standardized recipes for dinner and supper service complete. · Nutritional analysis and recipe redevelopment.
26 March 2001	· Introduction of two-stage products to the dine service units. · Information system development complete.
23 April 2001	· Complete two-stage production serving dinner and supper for all units.

Attachment 3: Implementation Plan details the major steps required to test and implement the new model prior to service delivery.

VIII PRELIMINARY OPERATING BUDGET

This draft budget provides an estimate of the cost of providing an in house patient food service. The proposed volumes and required food types as well as the cost parameters for the production of additional foods for long term care are unknown at time of writing. As such, no attempt is made to estimate this additional cost. Detailed costs are shown in Attachment 4: Draft Operating Budget.

Salaries & Benefits	$2,069,939
Food Cost	$1,500,000
Enteral Supplies	$115,000
General Supplies	$134,478
Software Maintenance	$15,000
TOTAL	**$3,834,417**

Preliminary Transition Budget:

At time of writing many transitional cost items related to this project are unknown. Salary, supply and information technology cost will be incurred with respect to the phasing in of the food service solutions. Initial projections of transitional salary costs are as follows:

Salaries:	Project diet clerk (1 year term)	$28,800
	CBORD training specialist	$75,000
	CBORD software	$75,000
	Equipment/Recipe specialist	$50,000
	Staff training costs	$40,000

IX COMPARATIVE ANALYSIS OF OPERATING COSTS

	Previous to RDF Service	99/00 Adjusted Actual	New System Proposed
Salaries & Benefits	2,000,928	1,091,015	2,069,939
Food	770,889	-	1,500,000
Enteral Supplies	99,225	111,298	115,000
General Supplies	84,159	37,710	134,478
Software Maintenance			15,000
RDF Meals - Excluding Debt	-	2,903,840	-
TOTAL	**2,955,201**	**4,143,862**	**3,834,417**

X DRAFT CAPITAL BUDGET

Estimates for the preferred option were provided by Marrack + Associates. Their attached memo (Attachment 5: Draft Capital Budget) dated March 27, 2000 states "As discussed, this is a very preliminary "high level" capital budget estimate. It is based on undertaking minimal renovations to the existing kitchens at the above hospitals in order to implement independent meal assembly and/or production capabilities. In order to qualify these costs, further more detailed investigation by an architect, engineer, food service consultant and cost consultant would need to be done." The equipment cost for the project is estimated at 1.8 million dollars. Construction costs are estimated at 1.2 million dollars.

TOTAL PROJECT COSTS FOR THE PREFERRED OPTION $3,029,609

XI RECOMMENDATIONS

That the Deer Lodge Centre Board of Directors accepts the following recommendations for transmittal to government for approval.

1. Acceptance of Option 3B: Site production with site tray and dine service utilizing current technology for Deer Lodge Centre. This option recognizes Deer Lodge Centre's potential to expand production to serve other sites through the Regional Distribution Facility for both regular and texture modified foods.
2. Once government approval is received that the board authorize Administration to implement the plan in this report.
3. That the Board request Administration to bring forward the detailed operational plan and budget at its June Board of Directors meeting.

Attachment I

— SHARED FOOD SERVICE WORKING GROUP ASSUMPTIONS & CRITERIA —

Assumptions:

- That the Human Resource base for a system production centre will come from within the system and must be qualified.
- That additional operating $ added to the system will be minimized.
- That capital expenditure will be minimized.
- That existing physical infrastructure is utilized.
- That there will be a change at Deer Lodge Centre
- That alternatives for the PCH's are explored.

Essential Criteria:

- A shared, system approach for administrative food and clinical nutrition services
- A system wide human resource function to support shared food services
- A system wide financial function to support shared food services
- Principles of 'best-practice'
- Maximization of efficiencies throughout the system
- Potential for growth of healthcare sector within Manitoba
- A patient focused philosophy
- A governance model which comprehensively addressees management, communication, decision making, conflict resolution and change processes
- A governance/management model which incorporates peer review
- Utilization of learned knowledge and employee skills
- Utilization of existing information services infrastructure
- A production component with:
    - a 'system' person charged with responsibility for management
    - adherence to all applicable health and safety standards
    - HACCP implementation (within six months of start-up)
    - Formalized quality-monitoring process
- An ability to respond to demographic and patient care changes and/or requirements in a timely manner
- Collaboration with the Clinical Nutrition Partners of Winnipeg: the system will endorse clinical practice standards
- Utilization of existing technology, with cold plated meals
- A strong education program to all internal and external stakeholders

Attachment 2

FACILITY PLANNING AND CONSTRUCTION SCHEDULE

1.	Identification of equipment requirements	2 weeks
2.	Facility planning - creation of the functional plan · To include job functions, a schematic plan with a descriptive narrative. · Contracting construction manager, architect and engineers	14 weeks
3.	Development of working plans (architects, engineers)	6 weeks
4.	Tender	3 weeks
5.	Review tender, select contractor, construction schedule	2 weeks
6.	Construction	6 weeks
7.	Commissioning	1 week
	Minimum time required:	**34 weeks**

IMPLEMENTATION PLAN

Task	Task Elements	
1. Staff recruitment	1.1	Consult with HR to identify the number of positions required. Creation of master rotations.
	1.2	Develop with HR a timetable for staffing that would include HR advising P.S.A.C.
	1.3	HR to provide notice of technological change.
	1.4	Reactivate the local labour adjustment committee.
	1.5	Development of job descriptions and provision of notice to P.S.A.C.
	1.6	Posting of positions
	1.7	Awarding of positions
2. Staff training & education	2.1	Assessment of current food service staff skill level
	2.2	Creation of a continuing staff education program "Diet U" with the following elements:
	2.2.1	Understanding of therapeutic diet (i.e. how diet relates to serving size, food/drug interactions).
	2.2.2	Understanding of therapeutic diets (i.e. how diet relates to serving size, food/drug interactions).
	2.2.3	Equipment training - operations and safety.
	2.2.4	Customer service training
	2.2.5	Sanitation.
	2.2.6	WHMIS
	2.2.7	HACCP (education on safe food handling. HACCP requires separate steps, post implementation to develop)
3. Menu Development	3.1	Identification and creation of standard menu template
	3.2	Creation of therapeutic and texture diet requirements
	3.3	Specialty population requirements (e.g. Dysphagia program).
	3.4	Creation of nourishment menu.
4. Service Planning	4.1	Identification & negotiation of customer service parameters. E.g. delivery schedules, product availability, ward-stock list, service window and response times.
	4.2	Identification of beltline and preparation stations.
5. Information Systems Planning	5.1	Identification and development of menu tracking model
	5.2	Identification and development of production tracking system.
	5.3	Identification and development of nourishment and ward stock ordering and processing systems.
6. Recipe development	6.1	Development of standardized recipes.
	6.2	Nutritional analysis of standardized recipes and re-development
	6.3	Recipe testing and reformulation
	6.4	Creation of specifications for procurement of foodstuffs.
7. Production Planning	7.1	Creation of ingredient control, pre-preparation and production schedules.
	7.2	Creation of master, weekly and daily inventory lists. (par stocks)
8. Transition Planning	8.1	Deliver staff education module to all staff.
	8.2	Begin service to all "dine" units.
	8.3	Begin service to all "trayed" units.
9. Financial Planning	9.1	Quantify food, supply and labour budgets.

Attachment 4

DRAFT OPERATING BUDGET

This draft budget provides an estimate of the cost of providing an in house patient food service. The proposed volumes and required food types as well as the cost parameters for the production of additional foods for long term care are unknown at time of writing. As such, no attempt is made to estimate this additional cost.

SALARIES & BENEFITS

Occupation	*Salary (Incl. 15% Benefits)*	*Equivalent Full Time*
Cook	198,282	6.3
Production Manager	43,931	1.0
Diet Clerk	74,688	2.5
Food Service Attendant	1,225,260	43.6
Ingredient Controller (FSA)	28,058	1.0
Cooks Helper (FSA)	56,116	2.0
Clinical Dietitian	234,820	4.6
Manager, Food & Nutrition	66,181	1.0
ESP Scheduling Clerk	21,286	0.5
Food Services Supervisor	99,352	2.9
Food Services Coordinator	21,965	0.5
TOTAL DEPARTMENT	**2,069,939**	**65.9**

FOOD COST

We estimate food cost to be $1,500,000 to serve 500,000 patient meals annually. We estimate enteral feeding cost to be $115,000.

SUPPLY COST

Item		*Item*	
Printing & stationary supplies	4,400	General	550
Paper stocks (menu paper)	9,900	Dressings	110
Photocopy supplies	1,100	Library texts	110
Waste disposal containers	1,980	Department supplies general	550
Cleansing agents	14,300	Delivery and courier	440
Staff wearing apparel	2,420	Travel staff local	330
Supplies, dietary	7,150	License fees	440
China	9,020	Photocopying	88
Glassware	2,750	Equipment maintenance	550
Cutlery	550	Rental/lease of equipment	880
Dietetic packaging	6,600	Minor equipment	3,300
Disposable ware	64,100	Paper stocks	2,200
Utensils	600		
		TOTAL	**$134,478**

Software maintenance is estimated at $15,000 annually.

TOTAL PATIENT SERVICES DRAFT OPERATING BUDGET $3,834,417

Addendum to Attachment 4

DRAFT OPERATING BUDGET

	Previous to RDF Service	99/00 Adjusted Actual	New System Proposed
Salaries & Benefits	2,000,928	1,091,015	2,069,939
Food	770,889	-	1,500,000
Enteral Supplies	99,225	111,298	115,000
General Supplies	84,159	37,710	134,478
Software Maintenance			15,000
RDF Meals - Excluding Debt	-	2,903,840	-
TOTAL	**2,955,201**	**4,143,862**	**3,834,417**

Attachment 5

DRAFT CAPITAL BUDGET

Soft Costs	*Budget*
Project Manager	$60,000
Architect	$70,000
Mechanical Engineer	$26,000
Electrical Engineer	$26,000
Structural Engineers	$ 3,000
Food Service Consultant	$90,000
Building Permit	$24,795
Disbursements	$20,000
Subtotal	$319,795
Contingency 10%	$31,979
TOTAL SOFT COSTS	**$351,775**

Hard Costs	*Budget*
Main Kitchen - from separate summary	$2,254,129
Hard Cost Contingency	$ 225,413
TOTAL HARD COSTS	**$2,479,542**

Total Project Costs (Excluding 7% GST)	$2,831,317
TOTAL PROJECT COSTS (INCLUDING 7% GST)	**$3,029,609**

MARRACK + ASSOCIATES INC.

Food Facility Planning and Design
Operational Training
Management Advisory Services

March 27, 2000

Mr. Dale Berry
Urban Shared Services Corporation
Senior Project Manager
287 Broadway Ave
Suite #500
Winnipeg, Manitoba
R3C 0R9

Reference: **Equipment Inventory and Independent Capital Costing**
Our Project Reference Number 00017

Dear Dale:

Please find enclosed a copy of the capital cost estimate for the independent provision of patient meals at the Health Sciences Centre, Deer Lodge and St. Boniface Hospital.

Drivers Jonas prepared the overall capital cost estimate. We prepared the estimate of food service equipment and provided a description of the assumptions, based on discussions with representatives at each hospital.

As discussed, this is a very preliminary "high level" capital budget estimate. It is based on undertaking minimal renovations to the existing kitchens at the above hospitals in order to implement independent meal assembly and/or production capabilities. In order to qualify these costs, further more detailed investigation by an architect, engineer, food service consultant and cost consultant would need to be done.

It should be noted that the estimate does not include full upgrading of the base mechanical and electrical infrastructure in each of the existing kitchens. It should also be noted that in general, the functions required for independent meal assembly and/or production have been fit into the existing spaces of the kitchens as best as possible. In some cases additional space is required which has been noted.

We have provided a summary of the assumptions that we used for this preliminary costing and suggest they be reviewed.

Sincerely,

MARRACK + ASSOCIATES
Food Facility Planning and Design Inc.

Matthew Marrack
Principal

145 Royal Crest Court, Unit 47 Markham, Ontario L3R 9Z4 - Tel (905) 513-0500 Fax (905) 513-0729

APPENDIX D

Shared Food Services Orientation Document

February 22, 2000
Revised May 26, 2000
(Reformatted)

Mandate

- Develop a vision.
- Identify alternatives for providing food for the new 340 PCH residents.
- Examine specific solutions for DLC within Shared Food Services network.
- Examine solutions for long-term care residents in this system.
- Establish a time line for required tasks and completion of the overall review.
- Receive and review the conclusions and recommendations of the Transition Team.
- Evaluate the current Winnipeg shared patient food service operations.
- Evaluate the quality and cost benefit of the current system and alternatives.
- Consider long-term alternative(s) to current Shared Food Services Plan.
- Make recommendations on the preferred patient food service system.
- Comprehensive communication strategy.
- Strong public education program.
- Submit report of recommendation on future of Shared Food Services in Winnipeg.

Vision

- Patient and resident focused
- Cohesive Shared Food Service system
- Flexible and responsive to need
- Fully integrated Shared Food Service system
- Quality and satisfaction
- "Best practice" concepts and design
- Financially accountable

Assumptions

- That the employee resource base for the shared food system will come from staff within the system if minimum qualifications are achieved.
- Operating dollars will be minimized.
- Capital expenditures will be minimized.
- Operational complexities will be minimized.
- Existing physical infrastructure will be utilized where feasible.
- That alternatives for existing 340 PCH beds (Concordia Place, Misericordia Place, Calvary Place) be explored – (short term).
- Additional infrastructure will be examined if practical.

Essential Criteria – Overarching

(Option screening tool)

- A shared system approach for administrative food and clinical nutrition services
- A system-wide human resource function to support Shared Food Services
- A system-wide financial function to support Shared Food Services
- Assessment for additional capacity for growth within the current system
- A patient-focused philosophy to serve patient/resident needs
- A comprehensive management model that addresses accountability, communication, decision making, conflict resolution, change processes and peer review
- Utilization of learned knowledge and employee skills
- Utilization of existing Information Systems infrastructure (CBORD)
- Strong focus on clinical practice standards through collaboration with clinical dietitians
- System accountability and responsibility through integrated management by stakeholders – linked to governance
- Principles of "best practice"
- Maximization of efficiencies throughout the system

Essential Criteria – Production

- A single program with multi-sites – management model
- Adherence to all applicable health and safety standards
- HACCP implementation within six months of start-up
- Formalized quality-monitoring process

Terminology

- **Cook/serve** – site production with a mix of sourced food
- **Sourced food** – produced outside the system and could include packaging, rehandling and/or distribution within the system
- **Centralized** – at the RDF for meal assembly, at a specified production site – RDF or other
- **Decentralized** – at any of the SFS sites
- **HACCP** – Hazardous Analysis Critical Control Point (integrity of the handling chain)
- **Next meal response time** – change made at next meal consumed by patient
- **Best practice**
- **Redevelopment costs**

Summary of Approach

Qualitative/operational

- Quality monitoring
- Rethermalization system
- Menu variety
- Appropriate/qualified staff
- Education and training

Diet compendium/diet definition

- Diet compendium
- SFS menu analysis
- CBORD database
- Operational process
- CQI/risk management
- Standardization of clinical practice within WRHA
- Education/communication

Operational

- Flexibility
- Response time
- Product availability
- Tray accuracy
- Nourishment delivery
- Re-handling
- Product availability

Summary of Approach, continued

Food production

- Product availability
- Identification of production volume
- Risk management
- Complexity

Physical

- Space allocation
- Retrofitting
- Construction
- Redevelopment costs

Financial

- Benchmark comparative approach
- Residual operating costs
- Operating cost minimization
- Capital cost minimization

Systemic

- Stakeholder feedback analysis
- Governance and management integration
- Accountability with responsibilities
- Communication
- Fully integrated system
- Menu needs

Anticipated Project Funding

- Anticipated project funding
- Capital costing
- Physical requirements
- Human resources
- Food safety/HACCP
- Communication and education
- Best practice

Deliverables

- Identification of options for meal assembly and food production
- Evaluation for each option
- Identification of physical plant and capital equipment requirements
- Financial comparison: operating and capital
- Consultation with stakeholders
- Implementation framework for the preferred option

APPENDIX E

Site Visit Report

Appendix E

Site Visit Report

Six members of the Work Group's Options Sub-committee travelled to a number of selected sites in Canada and the United States as part of a fact-finding mission to see what others in the health care field were doing to provide food service for their patients. The delegation included Mr. Paul Brewer, Manager of Operations at St. Boniface General Hospital; Mr. Frank Krupka, Director of Dietetics and Health Information Services at Deer Lodge Centre; Ms. Lori Yaworsky, Manager of Support Services at Riverview Health Centre; Ms. Colleen Koch-MacDonald, Director of Nutrition and Food Services at Health Sciences Centre; Ms. Janice Siemens, Clinical Manager of Nutrition Services at St. Boniface General Hospital; and Ms. Kathleen Richardson, Regional Assistant Director, Aramark Inc, Regional Distribution Facility.

In addition, two of the five union officials from the Working Group accompanied the delegation. They were Mr. Jim Sanford of the United Food and Commercial Workers and Ms. Lorraine Sigurdson of the Canadian Union of Public Employees.

In all, five centralized food production facilities were toured: one in Atlantic Canada, one in Ontario, two in New York and another in Georgia.

Although all the facilities visited were much smaller in scale than Winnipeg's Regional Distribution Facility, the trip proved a worthwhile exercise in terms of seeing first hand how others have structured their management and what problem-solving strategies they have in place. It also highlighted the value of good management-employee relations and the importance of ensuring everyone is on side in such undertakings.

Centralized food production and meal assembly system, Atlantic Canada

The system produces 6,000 meals daily for long-term care, acute care and pediatric patients at six sites.

- The facility, built at a cost of $11.3 million, is a 30,000-square foot central production and assembly site. It employs 98 equivalent full time workers (EFT's) plus 40 casual staff. The management team was hired three years prior to implementation.
- The human resources concept was developed in 1993, with planning for a three-phase program begun in 1996. A communication plan was developed for the entire process with standard scripts. Simultaneous announcements, stating that there would be job losses of about 120 EFT's, were made at all sites a full year in advance.
- Site implementation occurred over a five-week period. The system, however, was partially centralized prior to providing fully assembled meals. The system also had experience utilizing cook-chill technology prior to full centralization.
- A critical diet change policy is in effect for texture, location, change from NPO and allergies. Extra trays are provided as follows: three per cent for acute care, 1.5 per cent for long-term care (decreased on weekends). At first, this facility began at a rate of six per cent extra trays.
- As for management structure, three food service managers are each responsible for two sites. There are two tray lines: one acute care and one combined long-term care and pediatric. Average length of patient stay is four days.
- Food is delivered to sites by three trucks. Tube feeds are done at the sites. Some products for dysphasia diets are produced. Production is as close to 100 per cent as possible.
- Food-related issues are addressed at regular nursing group meetings at the various sites. There are weekly management meetings held at the central site involving all managers.

- On the clinical side, dietitians have input into menu development. There is a professional practice coordinator who confers with clinical dietitians, although the ultimate decision-making authority rests with the management team. Minor menu changes are not communicated; major changes involve the clinical group for input. Menus follow Canada's Food Guide for healthy eating.
- There is good, open communication with the unions.
- A ceremonial closing of the old kitchens was held prior to implementation of the centralized system.

Overall group impressions

There was extensive up-front planning which aided in buy-in and led to a well organized system with user buy-in and a team approach to managing the system.

Large teaching hospital, Ontario

The system operates on three sites and is comprised of 1,200 inpatient beds.

- Prior to its reform, this institution was a 1,000 bed hospital with a traditional conventional kitchen producing all food for the patient and retail areas. Two hot tray assembly lines were used, requiring a total of 100 FTEs on a daily basis for patient food services.
- In 1997, the management team was charged with the mandate to improve patient satisfaction while reducing departmental costs, maintaining customer satisfaction and improving operating results.
- Patient food service was converted to using rethermalization technology and a cold tray delivery system. A capital investment was required for the design, purchase, construction and installation of fixtures and equipment.
- A decentralized retherm system is now in place in the patient care unit, with delivery of hot meals by the unit's multi-skilled workers. The system features a 21-day menu which is 80 per cent outsourced. It has achieved annual savings of $1.5 million in patient services.

Overall impression

A well organized and well managed system. Strong emphasis is placed on monitoring client satisfaction. Problem solving and managing the system is predominantly data driven. This site demonstrated the value of evidence-based management for implementing change processes.

Off-site food production and meal assembly system, New York

The central production facility is located in a 400,000-square foot warehouse, of which about 35,000-square feet are in current use.

- The building is in major disrepair and is scheduled for closure within two years. The facility will then move into a new building attached to the main hospital it currently serves.
- It serves three hospitals and a total of 1,100 beds including pediatric, acute and long-term care.
- The system is producing 700 to 800 trays/meals. It does not provide extra trays. Instead, extra bulk food is sent to each hospital for each meal. Sites complete all late trays and dietary changes.
- The menu is a seven-day cycle selective. Pediatrics is restaurant-style. Average length of patient stay is six days.
- Central production plant employees number 104 EFT's, including management. There is a very high labour component and this facility is unionized. It currently produces four trays per minute and is at 80 to 90 per cent production. Patient meal costs are $40 per day, down from more than $50 per day. NYC average meal day cost is $30. Food is prepared one meal ahead.
- Meals are trucked to the hospitals, and there is a major problem with spillage due to poor roads. Broken carts are another problem – the system is currently spending about $6,000 a month in repairs.
- This facility makes extensive use of disposable items, using only plastic cutlery for patient trays.

- Food is delivered to the bedside by food service staff at all sites. The total system is 360 EFT's, including retail. Tray lines are two straight lines, eight positions per line plus two runners. It has a 92 per cent tray accuracy. Toast is not part of the menu for either patients or long-term care residents.

Overall impressions

Production plant would not meet Canadian standards. System is rife with redundancies and inefficiencies. Tray lines were slow and the rethermalization system used was awkward.

Large teaching hospital, New York

This centralized production site produces 800 trays daily for three hospitals within a ten-mile radius.

- The menu is hotel style, offering six or seven entrées for lunch and dinner daily.
- AHA/FSM benchmarking group cites this facility in the demonstrated best practice category.
- There are 166 employees, all unionized including the dietitians, for a total of 125.86 EFT's.
- There are two tray lines, eight positions per line. CBORD computer system is used for 109 diets, including pediatrics. It also has ADT interface.
- Centralized rethermalization is used. Tray accuracy cited at 95 per cent. Nurses and other health care professionals complete tray accuracy audits.
- There is no hot breakfast. Maternity wards are provided with a breakfast cart, all cold food. All other patients receive continental breakfast. There is a 24-hour turn-around for menus; five per cent extra trays provided per meal. About five per cent of food items are kept in a bulk cabinet unit for late trays.
- Breakfast is plated the night before. Food service staff deliver trays to bedside. Four dysphasia diets are provided. There is no thickened soup. Nurses thicken all products at the unit level.
- Average length of patient stay is four days and 15 days for psychiatric patients.
- About 90 per cent of all entrees are produced in-house. There is a meal availability list of 29 items, which is considerably more limited than Winnipeg's 137 items.

Overall impressions

Although this facility is heavily managed, productivity appears to be lower than Winnipeg. There is an excellent relationship at this facility with nursing staff.

Large teaching hospital, Georgia

This central production site serves five hospitals and long-term care centers. It produces 800 trays per meal, with a menu cycle of seven days for acute patients, 21 days for long-term and one week overlaps for acute.

- Menu selection is minimal. There is a menu grid that patients choose from, plus a list of additional items.
- The facility has an executive chef who attends nursing and new patient orientation and actually visits patients at the bedside if there are problems with food service. The meals are delivered to patients by nurses. Average length of stay is 3.5 days for acute care.
- It provides food for 50 to 80 house diets (single restriction) and uses a rethermalization conduction system. The trays must be transferred from a transport cart to the rethermalization carts, which means double handling of trays.
- There is one central budget and no allocation of cost to sites as is the case in Winnipeg.
- A menu management system is used at each site to order groceries for ward stocks. About six per cent extra trays are provided. Facility has 25 per cent tray changes at each site. It leaves all discharge trays on the carts so that nurses can make changes. Late meal trays can run from 35 to 55.
- The production facility turns out 99 per cent of entrées. Though designed for 2,200 trays per day, it currently produces 2,600. It makes high use of disposable items on trays.
- Management implemented a formed food program but found this was not accepted because it took too long to feed patients. Consequently, the facility has gone back to unformed texture-modified foods.

- Because of cultural preferences, it does not serve toast—only biscuits or bread at breakfast time.
- All five facilities were brought on line over a one-week period. This proved very difficult. Prior to implementation, independent sites were cook/chill and rethermalization in a computerized environment.
- Total equivalent full time staff is 170. All are non-union.
- Eight positions are on the tray line, plus one runner. The tray line is stopped to change foods for the long-term care menu.
- Hot beverage is not served for lunch or dinner as iced tea served to meet cultural preferences. All items on the tray were disposable, except for the entrée plate.

Overall impressions

This facility is well organized, although space is limited. There is one person in charge of the entire system. Costs not available.

APPENDIX F

Stakeholder Survey Executive Summary

2. EXECUTIVE SUMMARY

Strengths
Despite sweeping criticisms of Shared Food Services overall, many staff noted some redeeming strengths:

- many indicated food was typically the right temperature and delivered on-time.
- sixty percent upheld the training received to support their role in the system was satisfactory.
- about half agreed meals were easy to handle.
- some agreed the quality and variety were acceptable.

Weaknesses
Staff criticisms of SFS tended to centre on concerns about food quality and nutritional value.

- many respondents asserted food was typically unsavoury in terms of appearance and texture, or was often overcooked. (Seventy percent of respondents pointed out they had sampled the food provided by SFS.)
- others emphasized issues pertaining to communication needed to be addressed (i.e. either it took too long to respond to recommendations or worthwhile changes were not being implemented at all).
- a few argued the system was insufficiently flexible in meeting individual dietary needs; some contended this could be life threatening in the case of some patient/residents.
- a few argued SFS policies and procedures were insufficiently defined to support staff needs.
- a few complained replacement food and additional supplies were not always available or selection was limited especially outside of regular meal times.

Improvements
Recommendations for improvement focused largely on enhancing the food's nutritional value, appearance and texture.

- some contended order accuracy could be improved (i.e. items were either missing or wrong) and more could be done in responding to special diet needs/requests. (Many called for freer access to dietitians and other support staff.)
- many were satisfied with the ease of handling meals, however, others maintained tray were sometimes awkward, too hot and that packages were difficult to open.
- among those dissatisfied with communication, many suggested the system could be better organized as well as expedited.
- although training was a strength, some insisted they had not been trained particularly in the use of C-Bord; others felt the training to support their roles in the system could be revised or otherwise improved.

Overall Satisfaction

- roughly 25% noted they were either "satisfied" or "very satisfied" with SFS overall.
- the largest majority, however, (41%) maintained they were "not at all satisfied," while the remainder described themselves as "somewhat satisfied."

Some general trends can be observed with regard to variances in opinion among the eight institutions participating in the study. *(See Section: 4. Detailed Findings Cross Tabulations by Centre)* Nursing and dietary aide staff at longer-term admission, community-based facilities like Deer Lodge tended to describe themselves as having more frequent patient/resident contact compared to most of their colleagues at larger hospitals. These staff also believed they had a more "extensive" familiarity with SFS. They also appeared to express somewhat more pronounced dissatisfaction in the leading areas of concern including food quality/appearance, the system's ability to capture special dietary needs/requests and overall communication.

Comparative Satisfaction by Centre*

	Concordia	Grace	Misericordia	Victoria	Riverview	Seven Oaks	Calvary	Deer Lodge	TOTAL
Overall satisfaction	23.6	32.5	19.5	22.5	19.5	14.8			24.7
Meal delivery times	69.4	69.0		71.4		68.8	73.4	69.7	68.8
Training	58.5	69.1	68.7	48.2	48.0			56.3	60.7
Ease of handling/serving	50.0	61.1	43.8	54.5		43.4		41.3	49.8
Accuracy of tray orders		36.9	30.2	37.1		26.1	47.8	25.9	34.4
Process access replacements	30.8		28.3	32.9	30.4	34.0		34.4	33.7
Process handling concerns	28.6	27.2	30.5	37.8	31.5			29.7	33.4
Response time special needs		26.5	35.0	29.3	32.8	24.0		29.5	33.4
Response to concerns	34.6	28.0	25.0	27.1	30.3			20.9	31.0
Tray appearance	30.4	32.4	28.9	27.3	22.8	26.9			31.0
Process capturing diet needs	20.3	30.2	24.3		24.0	19.2		17.2	25.8

*Percentage of respondents who indicated they were satisfied or very satisfied on a four point scale.

Most Satisfied Centre
Least Satisfied Centre

Overall, Calvary Place appears to be most satisfied with Shared Food Services, while Deer Lodge Centre appears to be the least satisfied. The levels of satisfaction vary somewhat among the other centres depending largely on the different aspects of SFS. Riverview Health Centre and Seven Oaks General Hospital appear to be significantly more dissatisfied than the others on several of those aspects.

It's reasonable to assume traditional expectations of institutional food can influence perceptions of it. Unfortunately whether hospitals, military bases or commercial airlines serve the food, individuals tend to expect the quality, texture, taste, freshness and variety to be unsatisfactory. Without question the volume, preparation speed, demands of special dietary needs plus budgetary restrictions represent a substantial challenge. In the case of Shared Food Services, local media attention has possibly had an impact on the service's image.

Some staff participating in this study appear to sympathize with the challenges and appreciate the efficiencies derived from the new system. "It eliminates duplication of services (i.e. ware washing, traying, IT systems and purchasing of PT food and accessories)," one pointed out. Others seemed to agree. "The system is flexible and easy to work within when patient volumes fluctuate. It's been reliable and created space for use by the hospital." One maintained, "Initially Shared Food Services had good intentions...ideas and set-up according to what they though would meet the needs. I believe they're trying to keep to their initial plans."

The responses of most, however, indicate an emotionally-charged dilemma: The good intentions of the system's administrators are secondary if front-line workers feel forced essentially to serve meals perceived as unappetizing, lacking in variety or inappropriate for the dietary needs of the patient/residents being cared for. "While the residents can technically survive on what it is provided, it is unappetizing in all ways and is extremely demoralizing to them and those who must serve it," one wrote. This is likely exacerbated by concern for former support co-workers who may have been displaced because of Shared Food Services' implementation. Significant minorities called for a return to hospital-cooked meals and/or discontinuation of the system. Improvements to the food in terms of its appearance, taste, nutrition and variety would clearly be welcomed. Yet it also seems a more responsive communication system between SFS and the institutions it serves would be a strong platform from which to build goodwill. It's evident staff want their concerns heard and their recommendations addressed in a timely manner. "I have personally filled out a multitude of complaint forms on behalf of residents," one noted. "There has been no response to these complaints or resolution of the problems." Enhanced attention to detail would likely be compelling proof that nagging issues were be acted on. Some staff, for example, have suggested consideration be given to redesigning or perhaps modifying service containers so they are easier to handle and open.

There appears to be an opportunity to *reposition* the image of SFS. Most importantly, it's clear the healthcare workers participating in this study require genuine change. Working with the system's current strengths (i.e. efficient, on-time deliver of food), the system needs to be improved and fine-tuned. Changes must be made to restore confidence and garner support for the Shared Food Services system.

Further direct input from staff (i.e. committees, focus groups) would be appropriate and could be used in creating "buy in", streamlining communications to ensure tray order accuracy, response to special dietary needs/requests and more. As one wrote, "It's a huge team effort & we have to all look at it that way."

APPENDIX G

Background

Appendix G

Background

In 1997, Winnipeg hospitals embarked on a new shared food service to provide meals to their patients.

Conceived in an atmosphere of pressure to cut health care costs, the plan had its genesis in two consultants' reports recommending the system be reformed. That ultimately led to a decision to replace aging hospital kitchens with one shared food distribution facility to serve all sites.

An initiative of a magnitude not tried anywhere else, the plan called for the formation of a Regional Distribution Facility (RDF), now in its second year of operation. The 34,000-square-foot facility is located in St. Boniface Industrial Park.

There, prepared food – some of it fresh, some prepackaged and some frozen – is portioned onto trays. It is then trucked in a chilled state to each facility, where it is heated in special rethermalization units and served to hospital patients and long-term care residents.

The task is a monumental one that must go on 365 days of the year. It is far larger in scale and complexity than operating a large restaurant or banquet facility. The volumes of food needed, preparation time, demands of special dietary needs plus budgetary restrictions represent a major challenge. On top of all that, the system must also meet health regulations of three levels of government.

There are no actual cooking facilities at the RDF, which assembles about 7,000 meals daily. Of those meals, about 4,500 go to long-term care residents with the remainder to acute care patients at the hospitals. Meal planning involves 147 different diet types, taking into account the varied dietary needs of patients and residents. Some examples of

special diets are fat-controlled, diabetic, low-sodium, and texture-modified (for those with difficulty chewing).

Constructed in 1997-98, the RDF is managed by a private food service management company. Urban Shared Services was the non-profit corporation created in 1994 by the nine city hospitals to oversee shared services. It no longer exists. Its functions were incorporated into the Winnipeg Regional Health Authority as of April 1, 2000.

The following facilities are currently on the shared food services system: Concordia Hospital and Concordia Place, Calvary Place, Deer Lodge Centre, Salvation Army Grace General Hospital, Misericordia Health Centre, Misericordia Place, Riverview Health Centre, Seven Oaks General Hospital and Victoria General Hospital.

Although the RDF was originally intended to serve all of Winnipeg's nine hospitals, Health Sciences Centre and St. Boniface General Hospital continue to produce their own patient meals. The two hospitals have been paying their share of the system's costs (excluding food costs).

The first public announcements of the shared food initiative put the capital costs at $21 million. To date, a total of $24.9 million has been committed in capital costs for the RDF, equipment, hospital renovations and expenditures associated with human resources. That includes recent expenditures of more than $1.4 million for such items as installation of a back-up generator and new circular tray lines to improve efficiency and address workplace, health and safety issues.

The 1996 business plan for shared food services estimated annual savings at $7.6 million. Based on new information, the original plan was revised to indicate systems savings of $5 million annually. Actual experience with this new system has resulted in cost overruns; $3.7 million in '98-99 and an estimated $3.4 million in '99-00.

Most of the actual cost-overruns are attributed to higher food and labour costs than anticipated.

Some of the savings from a shared food system were to have come from a reduction in the total number of employees required. That was underestimated. The initial plan called for a total of 117 employees at the RDF to serve the entire system. Staff at the RDF currently totals 157. Though the RDF does not provide meals to the two major teaching hospitals, it does provide meals for approximately 500 beds that were opened but unplanned during development of the shared food initiative.

In addition, USSC and Manitoba Health paid out voluntary separation payments totaling $2.2 million to 267 workers. The majority of that was paid by Manitoba Health.

The toll on the employees is also deserving of mention. There was significant upheaval of food service workers who had to make choices to relocate to the RDF or move into other positions at the hospitals. Others had to retrain for different jobs, and some took severance packages. At St. Boniface General Hospital and Health Sciences Centre where implementation remains on hold, employees are still waiting after making their choices in the spring of 1998.

From its very inception, the shared food system came under intense scrutiny. It suffered more than its share of start-up problems. This was partly due to an implementation process the Provincial Auditor described as "very difficult" because of the undue haste with which hospitals were brought on line. Some parts of the RDF, such as the ware-washing room and equipment, were not fully complete when it began production, leaving staff to wash dishes by hand for the first few months.

Some of the difficulties stemmed from poor design features at the RDF or the omission of key back-up equipment to ensure uninterrupted service. These included no stand-by

generator in the event of a power outage, a back-up steam boiler, a third hot water tank and a second refrigeration unit.

The change from the original business case to go to 100 per cent outsourcing of food was a major decision which resulted in both higher food costs and less flexibility in the system. Flexibility was a major reason for the review of the system and an influential factor in ranking the options. There were also problems in acquiring the kinds of foods that lend themselves to re-heating.

Patient and staff dissatisfaction with the new system was immediate. Predominately two complaints came to the forefront: firstly, tray accuracy was a problem; and secondly, food quality.

Lack of consultation was also a problem. So was the failure to consider the unique needs of long-term care residents – especially those of the many Canadian veterans living at Deer Lodge Centre. Deer Lodge residents represent a special clientele with their own unique considerations. That their needs were overlooked in the new food system was seen by many as a major oversight.

Deer Lodge residents were particularly vocal about the type of menu offered, and complained about meat that was too well done while the vegetables weren't cooked enough. Deer Lodge Centre, though still on the central system, has since adapted its service to better meet the needs of its residents.

An independent survey by UV Associates in June 1999 measuring patient satisfaction found ratings were not all that bad, considering the kind of negative public attention the service had received. The survey compared patient satisfaction with that of 1998 when most facilities were still on the old system. It found the new SFS system was actually doing a better job of maintaining food temperature, and even ratings on appearance, taste,

variety, tray completeness and cleanliness had declined only modestly from the previous year.

Still, a USSC-commissioned survey in January 1999 by Western Opinion Research Inc. found the shared food system still left much to be desired in the eyes of the public. Half of the 600 Manitobans surveyed felt hospital food in Winnipeg was not as good as it was under the old system, and 56 per cent felt the new system was a bad idea, mainly because of the poor quality of the food.

The same survey also provided some valuable insights as to what the public believes is an acceptable standard for hospital meals. The majority of respondents felt the quality of food should at least measure up to that in a company cafeteria or family restaurant.

A strong majority (87 per cent) agreed that the quality of meals served in Winnipeg hospitals should not be sacrificed to save money, and a slightly smaller majority (68 per cent) agreed that quality should not be sacrificed even if the savings would be used to support other health services.

As well, it found there was a definite acceptance of some frozen food in hospital meals, and that it is okay to serve meals with a combination of fresh, frozen and packaged food – just as many families do at home.

One of the major short-comings of the current system that was highlighted in the Provincial Auditors' report stems from the failure to involve key stakeholders in the initial development of the shared food plan. In addition to a shared menu, the facilities on the system share a common diet compendium and computer database.

Physicians and clinical dietitians, as well as the entire interdisciplinary team, are dependent on the food services system to provide nutritious, appealing, safe foods for patients while meeting prescribed therapeutic interventions. This requires close

collaboration between clinical dietitians and food services to ensure that the nutritional needs of all patients are met and that the clinical dietitians have access to the appropriate foods as tools to implement their therapies. Clinical dietitians are essential stakeholders in any hospital food service for two reasons: one, food is the primary 'tool' used in their practice to achieve desired patient-centered, clinical outcomes; and two, they are perceived as front line representatives of the system to the customer (patient/resident) and other healthcare stakeholders (physicians, nurses, speech language pathologists, etc.). An integrated approach between food service operations and clinical nutrition is a success factor critical to any initiative selected. Nutrition standards used in practice must be consistent with food delivered to patients and residents.

The decision not to use locally-produced food impacted on the system's ability to provide for patients on some special therapeutic diets. The limited availability of specialty foods (e.g. gluten-free products, allergen-free products) and the system's inability to tailor choices limited the variety of foods provided on more specialized diets and affected clinical dietitians' ability to creatively satisfy patient needs.

With the exception of input in the diet compendium, clinical dietitians at the hospitals were left out of the early planning process. Consequently, the tray tickets produced by the database were not necessarily consistent with their diet prescription. The lack of clinical standards and criteria in the development of the CBORD diet office database is the primary cause for these discrepancies. Specific criteria for nutrient and ingredient content are required for every diet in the Diet Compendium to guide the process of coding foods. Foods are coded as compliant or not compliant to each and every diet in the database. For instance, if the presence of wheat flour is not noted in a soup, the computer system will identify that soup as compliant with a gluten-free diet when in fact it is not. Similarly, if the sodium content of soup is not accurately calculated or considered along with other meal components (entrée, starch, vegetable, etc.) the meal received may be higher in sodium than prescribed.

Food is an integral part of the healing and recovery process for any hospital patient. It also contributes significantly to the quality of life for our long-term care residents living in personal care homes. For those on special therapeutic diets, this lack of quality assurance has potentially serious implications.

It is estimated nearly half of the patients in hospital at any given time are on some sort of special diet. Since October, 1999 clinical dietitians at the various facilities have been working to correct any deficiencies in meal trays to ensure patients are getting the appropriate foods.

A number of initiatives are underway in collaboration with clinical dietitians to address the issue and key components of the system's backbone of quality assurance are expected to be completed later this year. For patients and residents, these processes will result in increased variety of food and improved tray and diet accuracy, plus more stringent controls regarding allergens. Stakeholders in the system will also benefit with results such as simplified processes, increased efficiencies with the computer system, assurance of nutritional integrity, and availability of user-friendly references.

APPENDIX H

Definitions

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Definitions

food production

The process of preparing and cooking food according to standardized recipes.

cook/serve

Traditional food service where raw food ingredients are prepared according to a standardized recipe, cooked and served immediately. The finished product is held in a steam table to maintain temperatures while being portioned onto trays.

sourced food

Food produced outside the meal assembly area and purchased in a fully cooked or ready-to-serve state that may require heating only.

centralized meal assembly

Patient/resident meals for numerous facilities assembled at one site (e.g. the Regional Distribution Facility). After assembly, trays/meals are transported to required locations.

centralized food production

The process of preparing and cooking food at one site according to standardized recipes for numerous facilities.

decentralized food production and meal assembly

Food production and assembly of patient and resident meals at more than one site.

Hazardous Analysis Critical Control Point (HACCP)

Food safety standards and processes developed to ensure safe meal preparation and delivery.

next meal response time

From the time of client request, or diet order change, the system ensures a process to implement/respond to the desired change at service of the next meal.

best practice

Evidence-based management that adopts food service practices considered 'best' for healthcare stakeholders.

cook/chill technology

Food production using a process whereby food is cooked to a 'just done' state and then rapidly chilled for storage where precise temperature controls are maintained.

rethermalization

The process of putting heat back into chilled foods (reheating) generally by using a conductive or convective heat source.

Class D estimates

Preliminary conceptual cost estimate based on costs per square foot; for example, three-month conceptual costing for all other options – used for this exercise.

APPENDIX I

Shared Food Services Working Group Membership

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Shared Food Services Working Group Membership

Original 12 Members:

Mr. H. Gauthier, Chair & CEO
St. Boniface General Hospital

Mr. M. Neskar, Vice Chair & CEO
Seven Oaks General Hospital

Mr. J. Husiak, CA, CMC
Provincial Government Transition Team

Mr. P. Brewer, Manager of Operations
St. Boniface General Hospital

Ms. J. Siemens, Program Support Manager
Nutrition Services, St. Boniface General Hospital
(Also representing the Clinical Nutrition Partners of Winnipeg)

Mr. F. Krupka, Director of Dietetics and Health Information Services
Deer Lodge Centre

Mr. J. Gordon, Vice-President of Finance and Support Services
Victoria General Hospital

Ms. C. Koch-MacDonald, Director of Nutrition and Food Services
Health Sciences Centre

Ms. K. Richardson, Regional Assistant Director
ARAMARK Canada Ltd., RDF

Ms. L. Yaworsky, Manager, Support Services
Riverview Health Centre.

Mr. Allen Rance, CEO
Misericordia Health Centre

Mr. Paul Kochan, Vice-President, Finance
Winnipeg Regional Health Authority

Additional Members:

Mr. D. Berry, Director of Engineering
WRHA Logistics Services

Ms. J. Legeros, Interim CEO
WRHA Logistics Services

Ms. L. Sigurdson
Canadian Union of Public Employees

Mr. J. Sanford
United Food & Commercial Workers

Ms. J. Malanowich
Manitoba Government Employees Union

Ms. P. Mason
Union of Veterans' Affairs Employees of the Public Service Álliance of Canada

Ms. B. Blanchard
Operating Engineers of Manitoba

Ms. A. Krueger
Community Representative

Ms. E. Padua, Administrative Support
WRHA Logistics Services